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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,075	11/14/2000	David E. Wenstrup	5060	9044

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EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 07/08/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/712,075

Applicant(s)

WENSTRUP, DAVID E.

Examiner

Alexis Wachtel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 14 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 12-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, drawn to a fibrous composite, classified in class 428, subclass 304.4.
- II. Claims 12-26, drawn to a method of making a composite, classified in class 156, subclass various.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case a materially different product can be made by the instantaneous method by providing two layers of batting web, rather than one as claimed and then needling the cushion layer to said two layers of batting web.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Jeff Bacon on 06-03-2002 a provisional election was made with traverse to prosecute the invention of group I, claims 1-11.

Affirmation of this election must be made by applicant in replying to this Office action.

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Claims 12-26 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. With regards to claim 10, Applicant does not clearly describe what is meant by term "holofil". Specification provides no definition for the word. As such the claim is so incomprehensible as to preclude examination on the merits.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2 rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,591,289 to Souders et al in view of US 3,870,590 to Hurwitz.

Souders et al is directed to headliners and teaches a headliner comprising a fibrous core with a cover on its front or passenger side providing an aesthetically pleasing ceiling surface (Col 4, lines 26-28). The fibrous core is formed from a nonwoven high loft batting of polymeric thermoplastic fibers having a small percentage of lowmelting temperature binder fibers that have been formed into a web that is then needled (Col 4, lines 33-38). Examples of the fibers used to make the batting included

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homopolymers and copolymers of polyester and polyolefins (Col 4, lines 46-49). The binder fibers that may be used include a low-melt polyester or polyolefin (Col 4, lines 53-55). The cover material may include nonwoven carpeting or knitted polyester tricot material. The cover material is coated with a heat activated adhesive on its backside such as polyester powder to bond the cover material (Col 5, lines 37-41).

Souders et al as set forth above fails to teach a headliner wherein a cushioning layer is disposed in between a cover layer and batting material. Hurwitz is directed to polyester textile materials and teaches that bulky fibrous masses are used as cushion fillers in applications including automotive headliners (Col 1, lines 35-46). Examiner equates such bulky fibrous masses to lofty nonwoven webs or mats. In view of this teaching it would have been obvious for one of ordinary skill in the art at the time the invention was made to have incorporated the bulky fibrous mass or lofty nonwoven web into the headliner of Souders et al such that said lofty nonwoven web is disposed in between said cover layer and said high loft batting material motivated by the desire to provide improved cushioning qualities to the resulting headliner and thus improve the aesthetics and luxurious feel of an automobile's interior.

Souders et al in view of Hurwitz as set forth above fails to teach how the lofty nonwoven web is attached to the batting layer. Since the batting layer is to be needed regardless, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have needed the lofty nonwoven web to the batting layer motivated by the desire to make use of a well known textile layer consolidation

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technique. Examiner notes that the needling process will cause interlacing of the fibers of the lofty nonwoven web and the fibers of the batting layer.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,591,289 to Souders et al in view of US 3,870,590 to Hurwitz and US 2001/0006165 A1 to Rashid

Souders et al in view of Hurwitz as set forth above fails to teach that the lofty nonwoven web is made of polyester or polyolefin. Rashid is directed to plastic containers and teaches that polyethylene terephthalate (PET) or polypropylene (PP) are typically used to construct plastic containers because of, among other reasons, the ability to reclaim and recycle containers (pp. 1, [0004], lines 10-14). In view of this teaching it would have been obvious for one of ordinary skill in the art at the time the invention was made to have made the lofty nonwoven web from a polyolefin or polyester motivated by the desire to make the headliner of which said lofty nonwoven web is a part of, recyclable.

With regards to claim 4-7, Souders et al in view of Hurwitz as set forth above fails to teach the claimed weight percentage range and amounts of low melting temperature fibers to high melting temperature fibers in the nonwoven batting. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the strength, stability and bonding characteristics of the non woven batting by selecting the relative proportions or amounts of the components through the process of routine experimentation.

With regards to claim 8, Souders et al in view of Hurwitz as set forth above fails to teach the claimed batting layer thickness range. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the strength and stability of the non woven batting by selecting the appropriate thickness range through the process of routine experimentation.

With regards to claim 9, Souders et al in view of Hurwitz as set forth above fails to teach the claimed cushion layer or lofty nonwoven web thickness range. However, since the cushion layer protects and automobile passengers head from painful physical contact with the metal roof structure of an automobile, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the softness and resulting comfort level of the lofty nonwoven web by selecting the appropriate thickness range through the process of routine experimentation.

The method limitation of claim 11, relating to the placement of the nonwoven batting material and the nonwoven cushion material (lofty nonwoven web) is given no patentable weight since both nonwoven cushion material and nonwoven batting material as taught by Souders et al in view of Hurwitz as set forth above do not appear to have a machine or cross-direction. Therefore claim 11 is satisfied above.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,591,289 to Souders et al in view of US 3,870,590 to Hurwitz in view of US 5,770,309 to Houpt et al. With regards to claim 10, Souders et al in view of Hurwitz as set forth above fails to teach using hollow fibers in the lofty nonwoven web. Houpt et al is directed to hollow insulation fibers and teaches that insulatory hollow fibers can be made from

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thermoplastic materials (Col 3, lines 23-26). Examples of such thermoplastic fibers include fibers made of polyester or polypropylene (Col 4, lines 30-33). Said hollow fibers can be made as either dual component or single component fibers (Col 6, lines 25-34). By employing hollow fibers that are hollow, more fibers can be used to make a "wool" bat without increasing the total amount of insulating material used. With more fibers being used, the overall surface area of the fibers in the "wool" lowers the thermal conductivity of the insulation product. Thus, with hollow fibers, less insulation material is needed to produce an insulation material with better insulating capabilities (Col 12, lines 58-65). Since it is well known in the vehicle headliner art that that said headliners functionally provide a degree of insulatory benefits to an automobile's interior, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have increased said headliner's insulatory capabilities by providing hollow polyester fibers into the lofty nonwoven web specifically for the reason that said lofty nonwoven web's insulatory properties will be improved.

***Prior Art of Record***

10. The prior art of record and not relied upon is considered pertinent to Applicant's disclosure. In addition, the following references are cited for disclosing various aspects of Applicant's invention:

US 4,002,367




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**Conclusion**

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Terrel Morris, can be reached at (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
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